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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,268	06/21/2001	Koji Takeguchi	100794-09745(FUJR 18.748)	6901

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EXAMINER	
PHILPOTT, JUSTIN M	

ART UNIT	PAPER NUMBER
2665	11

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/886,268	TAKEGUCHI ET AL.	
	Examiner	Art Unit	
	Justin M Philpott	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) *10-14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-9 in Paper No. 10 is acknowledged.

Claim Objections

2. Claims 1, 8 and 9 are objected to because of the following informalities: applicant is requested to insert commas as indicated in the following in order to clarify applicant's invention:

"guarantee information adding means for adding guarantee information, for guaranteeing the continuity of the divided signals, to each of the divided signals to generate transmission signals;" (claims 1 and 8), and

"on the basis of guarantee information, for guaranteeing the continuity of the divided signals, included in the divided signals." (claim 9).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claim 5 recites the limitation "each of the transmission signals variable" in claim 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,461,622 to Bleickardt et al.

Regarding claims 1, 8 and 9, Bleickardt teaches a transmission system for controlling the transmission of a multiplexed signal via a path, the system comprising: a sending apparatus (e.g., 200, see FIG. 2) including: signal dividing means (e.g., via combination of 205, 208, 211-213, 216-218) for dividing the multiplexed signal (e.g., 201) to generate a plurality of divided signals (e.g., 202-204) in the STS or STM transmission interface format (e.g., STS-1); guarantee information adding means (e.g., overhead inserters 217) for adding guarantee information (e.g., Stuffing Indicator and overhead bytes, see col. 4, line 30 – col. 6, line 5), for guaranteeing the continuity of the divided signals (e.g., see col. 6, lines 31-65 regarding Stuffing Indicator and overhead bytes extracted and evaluated to provide proper destuffing and alignment), to each of the divided signals to generate transmission signals; and signal sending means (e.g., 218) for sending the transmission signals; and a receiving apparatus (e.g., 500 in FIG. 5) including: a signal receiving means (e.g., via combination of 504-508) for receiving the transmission signals (e.g., 501); and signal restoring means (e.g., via combination of 509-511) for restoring the

multiplexed signal by constructing the divided signals (e.g., at output of 511) on the basis of the guarantee information (e.g., see col. 6, line 16 – col. 7, line 48).

Regarding claim 2, Bleickardt teaches the guarantee information adding means adds at least one of information regarding the type of the multiplexed signal (e.g., see col. 4, lines 30-59 regarding the number of fixed stuffing bytes which indicate a certain signal rate), the frame number of the multiplexed signal (e.g., see col. 5, lines 45-64 regarding frame reference bytes), and a division number (e.g., Stuffing Indicator byte, see col. 4, line 22 – col. 5, line 7) at the time of dividing the multiplexed signal to the divided signal as the guarantee information.

Regarding claim 3, Bleickardt teaches the guarantee information adding means adds the guarantee information in empty bytes of a path overhead (e.g., via path overhead generator, see col. 5, lines 45-64) for the divided signal.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bleickardt in view of U.S. Patent No. 6,473,438 to Cioffi et al.

Regarding claim 4, Bleickardt teaches the transmission system discussed above regarding claim 1, however, may not specifically disclose the receiving apparatus further includes delay

information notifying means for giving the sending apparatus delay information regarding delays which have occurred at the time of receiving the transmission signals.

Cioffi also teaches a transmission system for controlling the transmission of a multiplexed signal via a path, and further, Cioffi teaches providing improved synchronization upon experiencing delays. Specifically, Cioffi teaches a receiving apparatus (e.g., central unit 10) further includes delay information notifying means (e.g., delay correction information, see col. 15, line 62 – col. 16, line 20) for giving a sending apparatus (e.g., first remote unit 15) delay information regarding delays which have occurred at the time of receiving the transmission signals. Cioffi further discloses that the teachings are applicable to a wide variety of data transmission systems including systems utilizing fiber for transmission path means (e.g., see col. 3, lines 10-16; see also col. 5, lines 48-58 regarding additional applicability). The delay correction information teachings of Cioffi provides improved synchronization for a plurality of signals transmitted along a common path whereby a receiving apparatus (e.g., 10) can accurately coordinate and reliably interpret a plurality of multiplexed signals having various delays (e.g., see col. 2, lines 45-51; see also col. 2, line 65 – col. 5, line 58). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the delay correction information teachings of Cioffi to the transmission system of Bleickardt in order to provide improved synchronization for a plurality of signals transmitted along a common path whereby a receiving apparatus can accurately coordinate and reliably interpret a plurality of multiplexed signals having various delays (e.g., see col. 2, lines 45-51).

Regarding claim 5, Cioffi further teaches, on the basis of delay information, the signal sending means (e.g., at remote unit) sets the bit rate (e.g., data rate, see col. 4, line 64 – col. 5,

line 6) of each of the transmission signals and makes delay correction (e.g., see col. 3, lines 25-39).

Regarding claims 6 and 7, while Bleickardt in view of Cioffi may not specifically disclose the signal sending means overlaps portions of the transmission signals, whereby the signal receiving means makes delay correction by making use of an overlap, Examiner takes official notice that it is well known in the art of multiplex communications to overlap portions of transmitted signals whereby delay correction is performed at receiving means.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 5,257,261 to Parruck et al., U.S. Patent No. 5,878,039 to Gorshe et al., and U.S. Patent No. 5,917,870 to Wolf disclose synchronization means for SONET signals.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M Philpott whose telephone number is 703.305.7357. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on 703.308.6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Justin M Philpott

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